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## IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

YOSHIKAZU KATO : EXAMINER: COPPOLA, JACOB C.

SERIAL NO: 10/656,274 :

FILED: SEPTEMBER 8, 2003 : GROUP ART UNIT: 3621

FOR: INFORMATION PROCESSING

APPARATUS, INFORMATION PROCESSING METHOD, STORAGE MEDIUM, AND

**PROGRAM** 

### REPLY BRIEF

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

This is a Reply to the Examiner's Answer dated August 19, 2010.

#### I. STATUS OF THE CLAIMS

Claims 1-5 and 7-9 are pending. Claims 1-5 and 7-9 stand rejected. Claim 6 is canceled without prejudice or disclaimer. The rejection of Claims 1-5 and 7-9 is herein appealed.

## II. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1-3 and 7-9 are directed to statutory subject matter under 35 U.S.C. §101; whether Claims 1-3 are indefinite under 35 U.S.C. §112, second paragraph; whether Claims 1, 3-5, 7 and 9 are unpatentable under 35 U.S.C. §103(a) over Kent (U.S. Publication

2002/0040374) in view of Nii (U.S. Publication 2002/0065730); whether Claims 2 and 8 are unpatentable under 35 U.S.C. §103(a) over Kent in view of Nii in further view of Applicant's Own Admission (herein "AOA"); whether Claims 7 and 8 are indefinite under 35 U.S.C. §112, second paragraph (New Ground of Rejection).

### **III. ARGUMENT**

The Examiner's Answer clarifies certain aspects of the final rejections as well as adds new grounds of rejections. Nevertheless, Appellants believe that the final rejections are improper for the reasons provided in the Appeal Brief, and for the following additional reasons, which address points raised in the Examiner's Answer. Moreover, Appellants believe that the new grounds of rejection are also improper.

#### A. FINDINGS OF FACT

Appellants note that the Examiner's Findings of Fact (EFF) are subjective findings based on the Examiner's interpretation of the prosecution history. As such, Appellants provide no comments regarding the findings of fact and note that this should not be construed as an agreement by Appellants as to any of the EFF.

B. THE REJECTION OF CLAIMS 1-3 AND 7-9 UNDER 35 U.S.C. §101 AS BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER

With respect to the rejection of Claims 1-3 and 7-9 under 35 U.S.C. §101 as being directed to non-statutory subject matter, Appellants respectfully traverse this rejection.

The Examiner's Answer reasserts that Claims 1 and 7 are computer programs *per se* and that Appellants' specification supports a software-only embodiment by stating that "the series of steps described above may be executed by suitably functioning hardware or by software."

As stated in the in the Appeal Brief, however, Claim 1 is a means-plus-function claim under 35 U.S.C. §112, sixth paragraph, requiring that a claim limitation "be construed to cover the corresponding structure ... described in the specification and equivalents thereof." It is believed that the Appeal Brief and Appellants' specification clearly convey the structure of the information processing apparatus recited in Claim 1 at least via the CPUs 51 use of program code stored in RAM 53 to perform the CPUs processes.<sup>1</sup>

The Examiner's Answer asserts that the Appellant "contradicts his own findings of 'section V' by stating 'Figure 3 illustrates the structure of the information processing apparatus of Claim 1" and identifies Figure 4 as reading on the elements recited in Claim 1.<sup>2</sup> However, as noted on page 11, line 23 through page 12, line 2 of Appellants' specification, the RAM 53 of Figure 3 in the control center 3 of Figure 4 retains a program with functions such as those shown in Figure 4 and the storage unit 58 of Figure 3 holds data such as those indicated in Figure 4. Therefore, at least Figure 3 illustrates the structure of the information processing apparatus and any elements included therein as recited in Claim 1.

The Examiner's Answer asserts that the Appellant fails to identify the CPU 51 and RAM 53 as the corresponding structure for the elements recited in Claim 1.<sup>3</sup> However, the Appeal Brief on page 2, line 15 to page 3, line 9 clearly refers to CPU 51 and RAM 53 via

<sup>&</sup>lt;sup>1</sup> Appellant's Appeal Brief at page 6 and Appellants' specification at page 10, line 23 to page 11, line 1.

<sup>&</sup>lt;sup>2</sup> Examiner's Answer at page 27, lines 18-25.

<sup>&</sup>lt;sup>3</sup> Id. at page 27, line 26 to page 28, line 4.

references to page 10, line 23 to page 11, line 1 of Appellants' specification. Therefore, the Appeal Brief clearly identifies at least CPU 51 and RAM 53 as corresponding to the structure of the information processing apparatus and any elements included therein.

The Examiner's Answer asserts that Appellants' reliance on WMS Gaming, Inc. v.

International Game Technology should not be persuasive as no algorithm for performing the various elements of Claim 1 is recited in Appellants' specification. However, WMS Gaming specifically states:

In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor programmed to carry out an algorithm, the disclosed structure is ... the special purpose computer programmed to perform the disclosed algorithm. See Alappat, 33 F.3d at 1545, 31 USPQ2d at 1558.4 (Emphasis added).

As noted above, at least CPU 51 and RAM 53 represent corresponding structure for means-plus-function Claim 1. Further, the CPU 51 is programmed to carry out the algorithm disclosed in Figure 4 and on page 11, line 23 to page 13, line 21 of Appellants' specification. Therefore, the facts and holding of *WMS Gaming* are clearly applicable to this case.

The Examiner's Answer asserts that Claim 1 only recites elements that are equivalent to the "programs constituting the processing sequences" without reciting an element that is equivalent to the "dedicated hardware ... for execution" of the programs or equivalent to "a general purpose computer" for which the programs are installed and executed, and that Claim 1 is further indefinite for omitting essential structural elements relating to "dedicated hardware ... for execution" under MPEP §2172.01. It is noted, however, that MPEP §2172.01 relates to enablement under 35 U.S.C. §112, first paragraph, and is not applicable in

<sup>&</sup>lt;sup>4</sup> Id. at page 28, lines 5-11.

 $<sup>\</sup>frac{5}{\text{Id}}$  at page 28, line 12 to page 29, line 10.

the context of a 35 U.S.C. §101 rejection. Further, as noted above, a means-plus-function claim by its very nature is not required to recite an element that is equivalent to the dedicated hardware for the execution of programs and a general purpose computer or any essential structural elements relating to dedicated hardware as any corresponding structure must be determined from the specification or equivalents thereof.

As noted in the Appeal Brief, this structure can be found in the line following the above-noted description explicitly stating that "for software-based processing to take place, programs constituting the software sequences may be either loaded from dedicated **hardware** of a computer into its internal memory for execution, or installed upon program execution from a suitable program storage medium into a **general-purpose personal computer** or like equipment capable of executing diverse functions." Therefore, a proper interpretation of Claim 1 with respect to the specification clearly identifies Claim 1 as statutory as at least a machine or manufacture in conformity with 35 U.S.C. §101.

Furthermore, the USPTO Memorandum<sup>8</sup> cited in the Examiner's Answer identifies a first step of determining whether a claim is patent-eligible subject matter that lists software *per se* as not being directed to one of the statutorily allowable categories.<sup>9</sup> The memorandum then states that claims that cover both statutory and non-statutory embodiments fail the first step.<sup>10</sup> However, this guideline does not apply to Claim 1 as Claim 1 does not represent software *per se* because of the above-noted descriptions of the use of hardware for software-based processing.

<sup>0</sup> Id.

<sup>&</sup>lt;sup>6</sup> Appeal Brief at page 6, lines 15-23.

<sup>&</sup>lt;sup>7</sup> See MPEP §2181.

<sup>&</sup>lt;sup>8</sup> Hirshfeld, Andrew, H., <u>Effective Today: New Interim Patent Subject Matter Eligibility Examination Instructions</u>, August 24, 2009.

<sup>&</sup>lt;sup>9</sup> <u>Id</u>. at page 1, line 33 - page 2, line 29.

Moreover, the memorandum expressly states that "[t]hese examination instructions do not constitute substantive rulemaking and hence do not have the force and effect of law. Rejections will be based upon the substantive law, and it is these rejections that are appealable. Consequently, any perceived failure by Office personnel to follow these instructions is neither appealable nor petitionable."11 Therefore, Examiner's reliance on the memorandum is improper.

With respect to Claim 7, Appellants reiterate that Claim 7 is directed to an information processing apparatus which includes at least a management unit implemented using a central processing unit. Therefore, Claim 7 clearly cannot be asserted as being software per se as Claim 7 expressly recites that the management unit is implemented using a CPU as hardware. Thus, the CPU clearly represents at least a machine or manufacture in conformity with the requirements of 35 U.S.C. §101.

The Examiner's Answer asserts that the CPU is interpreted to be outside the scope of Claim 7, as Claim 7 does not require a CPU as a component but then concedes that each unit recited in Claim 7 requires hardware for implementation. 12 The Examiner's Answer then asserts, however, that each unit does not have to be partly hardware nor is a required hardware implementation a reason to assume the scope of the claim is anything other than software per se. However, MPEP §2143.02 clearly states:

> "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

<sup>&</sup>lt;sup>11</sup> <u>Id</u>. at page 1, lines 7-10. Examiner's Answer at page 29, line 13 to page 30, line 13.

Further, Claim 7 is sufficiently tied with a particular machine (CPU) in conformity with the requirements of 35 U.S.C. §101. Recent Supreme Court case law has clarified how a process claim can be considered statutory under 35 U.S.C. §101. Particularly, *In re Bilski* provides:

"This Court's precedents establish that the machine-or-transformation test is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under §101." <sup>1415</sup>

Thus, for at least the above-noted reasons, it is respectfully submitted that Claim 7 is patent eligible under 35 U.S.C. §101.

Accordingly, Appellants respectfully request that the rejection of Claims 1-3 and 7-9 under 35 U.S.C. §101 be reversed.

C. THE REJECTION OF CLAIMS 1-3 UNDER 35 U.S.C. §112, SECOND PARAGRAPH, AS BEING INDEFINITE

With respect to the rejection of Claims 1-3 under 35 U.S.C. §112, second paragraph, as indefinite, Appellants respectfully traverse this rejection. Initially, it is noted that although the Examiner's Answer of August 19, 2010 indicates this rejection as a "New Ground of Rejection", it is unclear how this rejection differs from the §112, second paragraph rejection provided in the Office Action of August 4, 2009 at page 4. In fact, the §112, second paragraph rejection provided in the Examiner's Answer does not add to the previous rejection from the Office Action of August 4, 2009 but instead merely repeats that the "written

<sup>&</sup>lt;sup>13</sup> In re Bilski, No. 08–964 (2008)

<sup>&</sup>lt;sup>14</sup> Id. at 957.

<sup>&</sup>lt;sup>15</sup> Further, it is noted that although Claim 7 is believed to conform to 35 U.S.C. §101 for the above-noted reasons, the Supreme Court in *In re Bilski* further clarifies that the Machine-or-Transformation test is *not the sole test* for determining patentability under 35 U.S.C. §101.

description fails to disclose the corresponding structure, material, or acts for the claimed function."<sup>16</sup>

Appellants, however, have already stated on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. Specifically, in the "SUMMARY OF THE CLAIMED SUBJECT MATTER" section of Appellants' appeal brief (which the Examiner had no objection to on item (5) page 2 of the Examiner's Answer), Appellants have clearly provided examples of the corresponding structure, material, or acts that are set forth in the written description of the specification that perform the claimed function.

The Examiner's Answer asserts that Appellant provides three inconsistent interpretations of the "storing means" of Claim 1.<sup>17</sup> However, it is noted that page 7, line 20 to page 8, line 4 of the Remarks of May 9, 2010, merely describes an example of the "means" described in the specification without specific reference to the "storage means." Further, page 8, lines 21-24 of the Remarks of May 9, 2010, merely describes an example of the "storage means" to which the Appeal Brief expands upon at page 2, lines 17-18. Therefore, it is respectfully submitted that the Appellants' prosecution history with respect to the "storage means" is not inconsistent and should be considered in its entirety when addressing arguments presented in the appeal.

The Examiner's Answer asserts that the Appeal Brief describes the "storages means" of Claim 1 as corresponding to the storage unit 58 in combination with content data 112.<sup>18</sup>

However, the Examiner is applying the citation of "Figure 4, items 58 and 112 and page 13,

<sup>&</sup>lt;sup>16</sup> Examiner's Answer at page 8, lines 11-13.

<sup>&</sup>lt;sup>17</sup> <u>Id</u>. at page 31, lines 17 to page 32, line 16.

<sup>&</sup>lt;sup>18</sup> Id. at page 34, line 9 to page 35, line 7.

lines 6-9" as only applying to the "storage means" without giving weight to the rest of the claim element reciting "storage means for storing a plurality of content data corresponding to the at least one order." Clearly, the citation refers to the storage unit 58 for storing a plurality of content data 112 corresponding to the at least one order. Nowhere does the Appeal Brief describe the "storage means" as corresponding to the storage unit 58 in combination with content data 112.

The Examiner's Answer asserts that the means elements recited in Claim 1 do not have corresponding structure in the specification because there is no disclosed algorithm and bases this assertion on the application of *Blackboard Inc. v. Desire2learn Inc.*, 91 USPQD2d 1481 (Fed. Circ. 2009), *Aristocrat Techhologies Australia Pty Ltd. V. International Game Technology*, 521 F.3d 1328 (Fed. Circ. 2008), and *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.ed 1359 (Fed. Circ. 2008). As such, the Examiner's Answer asserts that the selecting part 103 does not show how the function of the "reading means" is performed and that there is no corresponding algorithm to perform this function.

The Appellants' specification, however, clearly describes such an algorithm by stating on at least page 19, lines 13-21, that:

After the user preferences are determined in step S42, the selecting part 103 goes to step S43 to read content data. From the order accepting part 101, the selecting part 103 is given the electronic book identification information for identifying the content data ordered by the user. Based on the electronic book identification information, the selecting part 103 reads the corresponding content from the content data 112 stored in the storage unit 58.

Therefore, the corresponding structure for the "reading means" can clearly be found in the specification with respect to the above-noted algorithm performed by the selecting part 103.

As noted above, the corresponding structure for the "storage means" can be found in Appellants' specification at least on page 11, lines 8-10, and is described as a storage unit 58 formed by a hard disc drive or the like.

Turning to the remaining means elements, corresponding structure for the "ordering means" can be found in Appellants' specification at least on page 17, lines 6-18, stating:

In step S41, the order accepting part 101 of the control server 3 determines whether an order for the purchase of an electronic book is placed by an user.

Step S41 is repeated until such an order is found to be placed by the user. Given the order, the order accepting part 101 admits user information and information for identifying the ordered electronic book (i.e., electronic book identification information). The order accepting part 101 supplies the input user information to the preference determining part 102 and sends the electronic book identification information to the selecting part 103.

Corresponding structure for the "managing means" can be found in Appellants' specification at least on page 17, line 20 to page 18, line 1, stating:

In step S42, the preference determining part 102 determines the preferences of the user who has placed the order on the basis of the supplied user information. Upon determining the user preferences, the preference determining part 102 refers to the preference data 111 held in the storage unit 58.

Corresponding structure for the "arranging means" can be found in Appellants' specification at least in Figure 4 and the corresponding description on page 20, line 4 to page 23, line 2, stating that the sorting part 104 sorts the content data based on user preference data.

Corresponding structure for the "composing means" can be found in Appellant's specification at least on page 13, lines 12-21 and page 23, lines 3-9, stating:

The composing part 105 composes the multiple content data items that have been sorted, into a single electronic book to be offered to the user. The content data in the form of a single electronic book are transmitted from the communication unit 59 to the user terminal 4.

After the processing above, step S45 of Fig. 8 is reached for a composing process. This process requires that a plurality of sorted content data items be composed into a single electronic book to be offered to the user. As shown in Fig. 12, the composition more specifically involves putting together the sorted content data items into a single body furnished with a cover 141.

Therefore, the above-noted descriptions clearly describe the means elements and their corresponding descriptions in the specification. Therefore, *Blackboard*, *Aristocrat* and *Net MoneyIN* clearly do not apply to the instant application. Accordingly, Appellants respectfully request that the rejection of Claims 1-3 under 35 U.S.C. §112, second paragraph be reversed.

# D. THE REJECTION OF CLAIMS 1, 3-5, 7 AND 9 UNDER 35 U.S.C. §103(A) AS UNPATENTABLE OVER KENT IN VIEW OF NII.

With respect to the rejection of Claims 1, 3-5, 7 and 9 as unpatentable over <u>Kent</u> in view of <u>Nii</u>, the Examiner's Answer asserts that the "selecting of content based on user parameters" of <u>Kent</u> corresponds to the claimed "arranging" recited in Claim 1. In other words, the Examiner's Answer asserts that the "profiling program 132" via the "optimization program 48" and "database of content 160" of <u>Kent</u> clearly perform the "arranging" recited in Claim 1.

Kent, however, does not describe or suggest arranging the plurality of read content data in accordance with the managed preference data. Instead, Kent describes that the optimization program 48 matches the content with the profiling program 132 to ensure that

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<sup>&</sup>lt;sup>19</sup> Id. at page 45, lines 15-18.

the database of content 160 is efficiency correlated to match a user's requests and/or interests.<sup>20</sup> In other words, Kent describes prioritizing which content will be selected from the database of content 160 for the particular subscriber based on the user's preferences and the available content.<sup>21</sup> As such, Kent describes *limiting* the content that is included in a publication for a particular subscriber rather than arranging the plurality of content data in accordance with the managed preference data.<sup>22</sup>

Nii also does not describe or suggest arranging the plurality of read content data in accordance with the managed preference data. Instead, Nii describes tailoring the content to be delivered to a terminal based on a variety of stored tailorization parameters.<sup>23</sup> In other words, Nii also describes limiting the amount of content to be delivered and displayed based on the tailorization parameters rather than arranging the plurality of content data in accordance with the managed preference data.<sup>24</sup>

Conversely, the present invention arranges the plurality of content data rather than removing or limiting the content data which is displayed. Accordingly, the combination of Kent and Nii fails to describe the features and advantages of the present invention and Claims 1, 4, 5 and 7 patentably distinguish over Kent and Nii. Accordingly, it is respectfully requested that rejection of Claims 1, 3-5, 7 and 9 under 35 U.S.C. §103(a) be reversed.

<sup>Kent at page 7, paragraph 70.
Id. at page 7, paragraphs 77-79.</sup> 

 $<sup>\</sup>frac{1}{2}$  Nii at page 7, paragraph 79.

E. THE REJECTION OF CLAIMS 2 AND 8 UNDER 35 U.S.C. §103(A) AS UNPATENTABLE OVER <u>KENT</u> IN VIEW OF <u>NII</u> IN FURTHER VIEW OF APPLICANT'S OWN ADMISSION (HEREIN "AOA")

With respect to the rejection of Claims 2 and 8 as being unpatentable over <u>Kent</u>, <u>Nii</u> and <u>AOA</u>, the Examiner's Answer asserts that Appellants' alleged failure to respond to any Official Notice statements in the response of May 19, 2009 subject the present application to abandonment unless the Board of Patent Appeals and Interferences concludes that the Appellant did not desire to challenge the Officially Noticed statements.<sup>25</sup>

Appellants respectfully submit that these assertions as well as any assertions relating to the jurisdiction of the Board of Patent Appeals and Interferences are not supported by applicable law. Further, Claims 2 and 8 are noted to be allowable at least by virtue of their dependency on Claims 1 and 7, respectively. Moreover, Appellants note that the features disclosed in Claims 2 and 8 are not are not capable of instant and unquestionable demonstration as being well-known. As is noted in MPEP §2144.03, "it is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697."

F. THE NEW GROUNDS REJECTION OF CLAIMS 7 AND 8 UNDER 35 U.S.C. §112, SECOND PARAGRAPH AS BEING INDEFINITE

With respect to the rejection of Claims 1-3 under 35 U.S.C. §112, second paragraph, as indefinite, Appellants respectfully traverse this rejection.

Initially, the Examiner's Answer asserts that Claims 7 and 8 are indefinite for not containing a positive recitation of the "implemented using a central processing unit" of Claim

<sup>&</sup>lt;sup>25</sup> Examiner's Answer at page 49, line 7 to page 51, line 22.

7.26 In support this position, the Examiner's Answer identifies MPEP §2114 and concludes that "the patentability of a product claim is based upon structure, not how the structure is implemented or used."<sup>27</sup>

It is unclear how MPEP §2114 applies to the 35 U.S.C. §112, second paragraph, rejection outlined in the Examiner's Answer, as this MPEP §2114 merely relates to discussing the functional language of a claim to determine whether a claim distinguishes over the prior art. Further, the assertion in the Examiner's Answer that "the patentability of a product claim is based upon structure, not how the structure is implemented or used" is incorrect as it is well established that each word of every claim must be given weight. See In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Furthermore, even if, assuming arguendo, Claims 7 and 8 may somehow be interpreted as including only functional language via the use of a claimed element, Appellants note that in *In re Swinehart*, 169 USPO 226, 228 (CCPA 1971), the court stated:

[T]here is nothing intrinsically wrong with the use of such a technique in drafting patent claims. Indeed we have even recognized in the past the practical necessity for the use of functional language. (Emphasis added, citation omitted.)

Further, MPEP § 2173.05(g) states that a "functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used."

The Examiner's Answer asserts, in the alternative, that Claim 7 and 8 are indefinite because the recitation of "a management unit implemented using a central processing unit" of

<sup>&</sup>lt;sup>26</sup> Examiner's Answer at page 13, line 1 to page 14, line 6. <sup>27</sup> Id. at page 12, lines 16-27.

Claim 7 indicates a hybrid claim.<sup>28</sup> In support of this position, the Examiner's Answer asserts that the above-noted management unit could be understood as claiming a machine as well as a process for using the machine.<sup>29</sup>

The Examiner's Answer again misconstrues the MPEP in indicating Claims 7 and 8 to be hybrid claims. In this regard, MPEP §2106 states:

A claimed invention may be a combination of devices that appear to be directed to a machine and one or more steps of the functions performed by the machine ... Note that an apparatus claim with process steps is not classified as a "hybrid" claim; instead, it is simply an apparatus claim including functional limitations. See, e.g., R.A.C.C. Indus. v. Stun-Tech, Inc., 178 F.3d 1309 (Fed. Cir. 1998) (Emphasis added, citation omitted.)

One of ordinary skill in the art would clearly understand that Claim 7 is directed to an apparatus and that the phrase "a management unit implemented using a central processing unit" does not constitute a hybrid claim. Any assertions to the contrary are not supportable by applicable law. Accordingly, Appellants respectfully request that the new grounds of rejection to Claims 7 and 8 under 35 U.S.C. §112, second paragraph be reversed.

 <sup>1</sup>d. at page 14, line 7 to page 16, line 6.
 1d. at page 14, lines 15-22.

#### IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the cited references, whether considered alone or in combination, fail to disclose or suggest the combined features set forth in Claims 1-5 and 7-9. Accordingly, it is respectfully requested that the rejections of Claims 1-5 and 7-9 be reversed. Further, it is respectfully submitted that all other rejections are improper and should be reversed.

Respectfully submitted,

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